

USSN 10/802,275

6

**REMARKS**

Claims 26, 27, 29, 30, and 32-34 are currently under consideration in this case; claims 1-25 are cancelled and claims 28 and 31 stand withdrawn as being drawn to a non-elected invention. The July 2, 2007, Office action rejected claims 26, 27, 29, 30, and 32-34 under 35 USC 112, second paragraph, and under 35 USC 102. To expedite prosecution of this case, this Amendment and Response amends claims 26, 29, and 34, all without prejudice or disclaimer. Applicant reserves the right to pursue the subject matter of the original claims in co-pending applications. Support for the amendments may be found in the originally filed specification, claims and figures; no new matter has been introduced. After entry of this amendment, claims 26-34 remain pending in the application including 5 independent claims; two of which currently stand withdrawn from consideration. In view of the amendments and remarks presented in this paper, reconsideration of the application is respectfully requested.

**Claim Rejections under 35 USC §112**

In the July 2, 2007, Office action, the Examiner rejected claims 26, 27, 29, 30, and 32-34 under 35 USC 112, second paragraph, as being indefinite. In one aspect, the Examiner's rejection is based on the inconsistent use of "the valve needle" and "the valve member." In a second aspect, the Examiner has required the recitation of structural limitations that enable the functional limitations currently recited in the claims. For the following reasons, reconsideration and withdrawal of these §112 rejections are respectfully requested.

Applicant has amended claims 26, 29, and 34 to consistently recite "valve member" and to no longer refer to a "valve needle." This amendment finds full support in the originally filed claims, specification, or drawings. Moreover, each occurrence of "the valve member" enjoys antecedent support, being first introduced in each case as "a valve member." Accordingly, Applicants submit this aspect of the §112 rejection is no longer proper.

Applicant has also amended claims 26, 29, and 34 so as to address the Examiner's objection to the employment of functional limitations. Applicant submits that the amended claims now positively recite structural limitations that enable the functions recited in the original claims. Accordingly, Applicant respectfully submits that claims 26, 29, and 34, as amended, are allowable. Since claims 27, 30, 32 and 33 variously depend from amended

USSN 10/802,275

7

claims 26, 29, and 34, claims 27, 30, 32 and 33 are also allowable. Reconsideration and withdrawal of these rejections of claims 26, 27, 29, 30, and 32-34 are requested.

### Claim Rejections under 35 USC §102

In the July 2, 2007, Office action, the Examiner rejected claims 26, 27, 29, 30, and 32-34 under 35 USC 102(b) as being anticipated by Boecking (WO 00/11339). For the following reasons, reconsideration and withdrawal of these rejections are respectfully requested.

Applicant has amended claim 26 to emphasize that *the mechanical coupler is configured so as to mechanically couple the piston member to the valve member during an initial retraction of the actuator and to mechanically de-couple the piston member from the valve member after completion of the initial retraction of the actuator and that during the initial retraction of the actuator arrangement, the valve member is mechanically coupled to, and, thus, constrained to move with, the piston member away from the valve seating.* Similarly, Applicant has amended claim 29 to emphasize that *the mechanical coupler is configured so as to mechanically couple the valve member and the piston member together during an initial retracting movement of the valve member out of engagement with the valve seat and that the mechanical coupler is configured so as to mechanically decouple the piston member from the valve member after the initial retraction of the valve member such that the valve member is thereafter only hydraulically coupled to the piston member and is thus free to move relative to the piston member.* Finally, Applicant has amended claim 34 to emphasize that *the mechanical coupler is configured so as to mechanically couple the piston member and the valve member during application of an initial retracting force such that, in response to the initial retracting force, the valve member moves with the piston member and that during subsequent application of the second retracting force, the piston member and the valve member are mechanically de-coupled such that the piston member and valve needle are only hydraulically coupled and may thus move relative to one another.* These amendments find full support in the originally filed claims, specification, or drawings.

Neither Boecking nor any other prior art reference discloses a fuel injector wherein a mechanical coupler is configured so as to mechanically couple the piston member and the

USSN 10/802,275

8

valve member during application of an initial retracting force such that, in response to the initial retracting force, the valve member moves with the piston member. For example, In Boecking, it is apparent that such an arrangement is just not possible. Due to the gap, S-small, between the shoulder stop 12 of the second valve member 6 and the valve member 3 in Boecking's pressure control valve, during initial retraction movement of either component, they will not be mechanically coupled together such that the two components move together as required by Applicant's amended claims 26, 29, and 34. Accordingly, Applicant respectfully submits that claims 26, 29, and 34, as amended, are allowable. Since claims 2 and 8 depend from amended claim 1, claims 2 and 8 are also allowable. Since claims 27, 30, 32 and 33 variously depend from amended claims 26, 29, and 34, claims 27, 30, 32 and 33 are also allowable. Reconsideration and withdrawal of these rejections of claims 26, 27, 29, 30, and 32-34 are requested.

### CONCLUSION

In view of the foregoing, Applicant requests the withdrawal of the rejections of claims 26, 27, 29, 30, and 32-34. Reconsideration of the application and allowance of all pending claims is earnestly solicited. Accordingly, the Examiner is requested to reconsider and allow all of the pending claims and pass the case to issue. Should the Examiner wish to discuss any of the above in greater detail or deem that further amendments should be made to improve the form of the claims, the Examiner is invited to contact the undersigned at the Examiner's convenience.

Please charge any necessary fees, including any extension of time, or any other fee deficiencies to Delphi Technologies, Inc., Deposit Account No. 50-0831.

Respectfully submitted,

By: 

David P. Wood  
Registration No: 45,932  
Attorney for Applicant  
Phone No. 248-813-1202  
Fax No. 248-813-1222